

Claim Rejections – 35 U.S.C. § 103

Pursuant to paragraph 1 of the Office Action, claims 1, 5, 8, 11, and 13-18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable (i.e., obvious) over Collins et al. (4,910,770) in view of Russell et al. (5,757,803). In particular, the Examiner asserts that Collins et al. discloses a pair of telephone company wires (37b) and “an inherent first and second pair of subscriber wires ... the inherent first pair of wires *for carrying a first signal*, the inherent second pair of wires *for carrying a second signal* and the pair of telephone company wires (37b) *for carrying the combined signal of first and second signals.*” Office Action at page 2-3 (emphasis added). NOWHERE in Collins et al. is there even a hint of a disclosure or a suggestion that the telephone company wires (37b) carry anything other than a conventional telephone (i.e., POTS) signal, let alone a combined signal of first and second signals. It is *inherent* from the language and structure of claim 1 that the first signal and the second signal are *discrete electrical signals*, the first pair of subscriber wires for carrying *the first discrete electrical signal*, the second pair of subscriber wires for carrying *the second discrete electrical signal* and the telephone company wires (i.e., outside plant wires) for carrying *a combined signal comprising the first discrete electrical signal and the second discrete electrical signal*. Claim 1 specifically recites:

1. “A splitter module for mounting in a Network Interface Device (NID) ... the first pair of inside wires for carrying a first signal, the second pair of inside wires for carrying a second signal and the pair of outside [plant] wires for carrying a combined signal of the first and the second signals, ...
 - (b) an outside plant pair of terminals located on the block and configured for having the pair of outside plant wires connected thereto; ...
 - (f) a first inside pair of terminals located on the block, electrically connected to the second pair of contacts through the first demarcation point and configured for having the first pair of inside wires connected thereto;
 - (g) a second inside pair of terminals located on the block, electrically connected to the outside plant pair of terminals so as to receive at least the second signal and configured for having the second pair of inside wires connected thereto; ...

There can be no doubt from the claim language that a telephone line (37b) consisting of a copper twisted pair carrying *only* a POTS signal electrically connected to one or more subscriber

lines each consisting of a copper twisted pair carrying the same POTS signal does not disclose or suggest the claimed "first pair of inside wires for carrying a *first signal*," NOR "the second pair of inside wires for carrying a *second signal*" NOR "the pair of outside [plant] wires for carrying a *combined signal of the first and the second signals*." It clearly follows that Collins et al. cannot and does not (either expressly or inherently) disclose or suggest the claimed "second inside pair of terminals located on the block, electrically connected to the outside plant pair of terminals *so as to receive at least the second signal* and configured for having the second pair of inside wires connected thereto." A first signal carried by a first pair of inside (i.e., subscriber) wires, a second signal carried by a second pair of inside wires and a combined signal carried by a pair of outside plant wires are clearly express limitations of claim 1 that are not *inherent* in the disclosure of Collins et al. Without a splitter circuit, which Collins et al. does NOT have as discussed below, any electrical signal transmitted along the telephone company wires (37b) would produce the same electrical signal on any inside wire pair connected to subscriber terminals (35), regardless of whether the signal was filtered or modified in any way by circuit (43). This is because there is no disclosure or suggestion whatsoever in Collins et al. that the electrical signal may be separated and that inside wire pairs connected to terminals (35) may receive discrete electrical signals. The teaching of Russell et al. does not rectify the failings of Collins et al. because substituting the splitter circuit disclosed by Russell et al. would not produce the claimed invention without a wholesale reconstruction of the Collins et al. line module to accommodate inside wire pairs carrying discrete electrical signals and providing discrete demarcation points.

The Examiner further asserts that Collins et al. discloses "a *splitter* circuit (43a), ... with an inherent first pair of contacts ... as a point of communication between the terminals (37) and the splitter circuit (43a) ... and an inherent second pair of contacts ... as a point of communication between the splitter circuit (43a) and the terminals (35) ... [the] *splitter* circuit ... designed to pass the *combined signal* from the first pair of contacts to the second pair of contacts." Office Action at page 3-4 (emphasis added). NOWHERE in Collins et al. is there even a hint of a disclosure or a suggestion that the module (43) contains a *splitter* circuit. The Examiner states that the splitter circuit (43a) is "disclosed at column 6, lines 32-34 and exhibited in figure 9." Office Action at page 3, paragraph (c). However, the cited passage merely

discloses that "[s]uitable electrical conductors 54a and 37a interconnect jack 54 on module 43 with the telephone circuit 43a disposed in the module and with respective ones of the terminals 37." At column 6, lines 22-27, Collins et al. discloses that "[t]he jack assembly 54 is located on a removable module 43 which is capable of housing various types of circuits, as evident in FIG. 9, such as Maintenance Termination Units (MTU's), Remote Isolation Devices (RID's), and Half-Ringers." Each of the examples of telephone circuit (43a) expressly disclosed in Collins et al. operates on a single telephone line carrying a discrete electrical signal. Claim 1 specifically recites:

(c) a *splitter* circuit housed in the block with a first pair of contacts electrically connected to the outside plant pair of terminals and a second pair of contacts, a first circuit component of the circuit electrically between the first and the second pair of contacts and designed to *pass only the first signal from the first pair of contacts to the second pair of contacts*; ...

A splitter circuit (as the term is commonly understood and defined in Applicants' specification) separates a combined signal (i.e., a POTS signal and an xDSL signal) into a first signal comprising only a portion of the combined signal (i.e., a POTS signal) and a second signal comprising at least a *different* portion of the combined signal (i.e., an xDSL signal or the combined signal). Applicants specifically claim a splitter circuit, and not a filter circuit, such as a low pass filter, which operates on a single telephone line to modify a discrete electrical signal. The teaching of Russell et al. does not rectify the failings of Collins et al. Since *both* pairs of subscriber terminals (35) are electrically connected to jack (54) by cable (51) having modular plug (52) adapted to be received in jack (54), and electrical conductors (54a) electrically connect the jack (54) with the telephone circuit (43a), substituting the splitter circuit disclosed by Russell et al. for the telephone circuit (43a) would result in the *same* electrical signal being conducted to both pairs of subscriber terminals (35).

The Examiner admits that Collins et al. "fails to specifically disclose a splitter circuit with a first circuit component designed to pass only the first signal and a second jack and second plug removably inserted therein ... to provide a demarcation point for the signal received by the second inside pair of terminals." Office Action at page 5. The Examiner then "maintains that it

STABER et al.
Serial No. 09/001,565
Page 5

was well known in the art to provide a splitter circuit with a first circuit component designed to pass only the first signal and a second jack and second plug removably inserted therein ... to provide a demarcation point for the signal received by the second pair of inside terminals, *as taught by Russell.*" *Id.* (emphasis added). NOWHERE in Russell et al. is there even a hint of a disclosure or a suggestion that the POTS splitter circuit is electrically connected to a first jack and first plug to provide a demarcation point for the first signal, let alone a *second* jack and *second* plug to provide a demarcation point for the second signal. The Examiner states that Russell et al. discloses "an inherent second jack" and "an inherent second plug" electrically in series between the loop (17) and the "inherent subscriber terminals" to provide "a [an inherent?] demarcation point for the signal received by the inherent inside terminals, as disclosed at column 3, lines 28-30 and exhibited in figure 7." Office Action at page 6. However, the cited passage merely states:

"... a splitter operable for splitting the subscriber loop into a first transmission path including a low pass filter which accommodates a continuation of telephone service signal transmissions along the subscriber loop and a second transmission path...

It is inconceivable how the cited passage, or any other portion of the disclosure of Russell et al. for that matter, teaches a second jack and second plug for providing a demarcation point for the second signal, "inherent" or otherwise. The Examiner has merely cited references which disclose the *individual* components of Applicants' invention without providing sufficient justification to support combining the references.

A rejection for obviousness must be based on evidence relevant to a finding of whether there is teaching, motivation, or suggestion in the prior art to select and combine the references relied on as evidence of obviousness. In re Sang Su Lee, 61 USPQ2d 1430, 1433 (Fed. Cir. 2002). In particular, there must be objective evidence of record explaining why one of ordinary skill in the art would have been motivated to select the references and to combine them in the manner proposed by the examiner to render the claimed invention obvious. *Id.* at 1434; In re Kotzab, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000) ("particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would

have selected these components for combination in the manner claimed”). The subjective belief of the Examiner “that it was well known in the art to provide ... a second jack and second plug removably inserted therein located electrically in series between the outside pair of terminals and the second inside pair of terminals to provide a demarcation point for the signal received by the second inside pair of terminals” and “that one of ordinary skill in the art would have recognized that a second jack would have been provided for testing of the xDSL communication signal” and “that one of ordinary skill in the art would have recognized that a second plug would have been provided to communicate with the inherent second jack” do not satisfy the requirement for “objective evidence of record.” Conclusory statements, such as those listed above, do not fulfill the Examiner’s obligation to provide reasoned findings based on objective evidence of record. See In re Zurko, 258 F.3d 1379, 1385, 59 UPQ2d 1693, 1697 (Fed Cir. 2001) (“deficiencies of the cited references cannot be remedied by the Board’s general conclusions about what is ‘basic knowledge’ or ‘common sense’”). These *recent* Federal Circuit decision clearly establish the requirement for the Examiner to provide *objective* evidence on the record explaining *why* one of ordinary skill in the art would have motivated to combine the cited references in the manner proposed by the Examiner. “This factual question of motivation is material to patentability, and could [can] not be resolved on subjective belief and unknown authority.” In re Sang Su Lee, 1430 USPQ2d at 1434.

For the reasons stated above, the Examiner has failed to establish a *prima facie* case of obviousness regarding independent claim 1. Accordingly, claim 1 is allowable. Independent claim includes the same patentable *combination* of limitations as claim 1 (e.g., first pair of inside wires for carrying a first signal, second pair of inside wires for carrying a second signal, pair of outside plant wires for carrying a combined signal of the first and second signals, a splitter circuit having a first circuit component for passing only the first signal, second jack and second plug). Thus, claim 5 is likewise allowable for at least the same reasons. Independent claim 15 includes the same patentable *combination* of limitations as claims 1 and 5, except that the first signal is expressly a POTS signal, the second signal is expressly an xDSL signal, the combined signal is expressly a combined POTS and xDSL signal, the splitter circuit is expressly an xDSL splitter circuit for passing only the POTS signal, the second inside pair of terminals receive at least the

STABER et al.
Serial No. 09/001,565
Page 7

xDSL signal, the first jack is a POTS jack and the second jack is an xDSL jack. Thus, claim 15 is likewise allowable for at least the same reasons. Independent claim 18 includes the same patentable *combination* of limitations as claims 1 and 5, except that the first jack is an RJ-11 jack, the first plug is an RJ-11 plug, the second jack is an RJ-45 jack and the second plug is an RJ-45 plug. Thus claim 18 is likewise allowable for at least the same reasons. Claims 5, 11, 13, 14, 16 and 17 depend directly or indirectly from the patentable base claims 1, 8, 15, or 18, and thus, are likewise allowable for at least the same reasons. Accordingly, Applicants respectfully request the Examiner to withdraw the rejection of claims 1, 5, 8, 11, and 13-18 under 35 U.S.C. § 103(a).

Pursuant to paragraph 2 of the Office Action, claims 2, 6, 12 and 20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable (i.e., obvious) over Collins et al. in view of Russell et al. and further in view of well known prior art. The Examiner "takes official notice of the fact that it was well known in the art to have blocks of sufficient size to occupy two mounting locations," Office Action at page 20, and "takes official notice of the fact that it was well known in the art to have a combined signal jack and combined signal plug removably inserted therein ... to provide a test point for the combined telephone company signal," Office Action at page 21 et al. Firstly, the Examiner is reminded that common knowledge and common sense are not a substitute for the objective evidence of record, objective analysis, proper authority and reasoned findings required to support an obviousness rejection. In re Sang Su Lee, 61 USPQ2d at 1435, *distinguishing and explaining In re Bozek* ("Bozek did not hold that common knowledge and common sense are a substitute for evidence, but only that they may be applied to analysis of the evidence). Secondly, there is NO objective evidence of record and Applicants are unaware of the existence of ANY evidence that "it was well known in the art to have a *combined signal* jack and *combined signal* plug removably inserted therein ... to provide a test point for the *combined telephone company signal*". Thirdly, claims 2, 6, 12 and 20 depend directly or indirectly from patentable base claims 1, 8 or 18, and thus, are likewise allowable for at least the same reasons. Accordingly, Applicants respectfully request the Examiner to withdraw the rejection of claims 2, 6, 12 and 20 under 35 U.S.C. § 103(a).

Pursuant to paragraph 3 of the Office Action, claim 7 stands rejected under 35 U.S.C. § 103(a) as being unpatentable (i.e., obvious) over Collins et al. in view of Russell et al. and further in view of Butler et al. (5,548,641). Claim 7 depends from patentable base claim 1, and thus, is likewise allowable for at least the same reasons. Accordingly, Applicants respectfully request the Examiner to withdraw the rejection of claim 7 under 35 U.S.C. § 103(a).

Pursuant to paragraph 4 of the Office Action, claims 1, 2, 5-8, 11-18 and 20 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-29 of U.S. Patent 6,137,866 in view of well known prior art. The Examiner asserts that although the conflicting claims are not identical, they are not patentably distinct from each other because subject matter claimed in the present application is drawn to the concept of splitting a combined signal from a telephone company. Applicants traverse the rejection for the same reasons as discussed above with regard to the need for objective evidence of record explaining why one of ordinary skill in the art would be motivated to combine the reference with "the well known prior art" and that common knowledge and common sense are not a substitute for such evidence. In re Sang Su Lee at 1435. Furthermore, the claims of the '866 patent are directed to a splitter assembly adapted for mounting *within the premises*. The claims of the '866 patent do not include many of the limitations of the pending claims, including *inter alia* the first jack and the first plug for providing a demarcation point for fault isolation testing of the first signal, or the second jack and the second plug for providing a demarcation point for fault isolation testing of the second signal. The '866 patent merely claims a splitter circuit having specific terminations for use within a premises where it is *impossible* to conduct fault isolation testing on the inside wiring. Thus, it would not be obvious to provide the splitter circuit of the '866 patent with the claimed test jacks and removable plugs because IT WOULD BE USELESS TO DO SO. A *reasonable* person of ordinary skill in the art would not be motivated to modify a splitter circuit for use in a premises by adding test jacks and removable plugs that serve NO USEFUL purpose whatsoever. Accordingly, Applicants respectfully request the Examiner to withdraw the rejection of claims 1, 2, 5-8, 11-18 and 20 under the judicially created doctrine of obviousness-type double patenting.

STABER et al.
Serial No. 09/001,565
Page 9

CONCLUSION

This Amendment After Final is fully responsive to the Office Action. In view of the foregoing remarks, Applicants submit that the application is now in condition for immediate allowance. The Examiner is encouraged to contact the undersigned directly to further the prosecution of any remaining issues, and thereby expedite issuance of the Notice of Allowability.

This Amendment does not result in more independent or total claims than paid for previously. Accordingly, no fee for excess claims is due. If there are any other fees due in connection with the filing of this response, the Examiner is authorized to charge those fees to Deposit Account No. 19-2167. If a fee is required for an extension of time under 37 C.F.R. § 1.136 not already accounted for, such an extension is requested and the fee should also be charged to Deposit Account No. 19-2167.

Respectfully submitted,



Christopher C. Dremann
Attorney for Applicants
Registration No. 36,504
P. O. Box 489
Hickory, N. C. 28603
Telephone: 828/901-5904
Facsimile: 828/901-5206

Dated: February 21, 2002